

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/559,595
Source: LEWP
Date Processed by STIC: 01/04/2006

ENTERED



IFWP

RAW SEQUENCE LISTING

DATE: 01/04/2006

PATENT APPLICATION: US/10/559,595

TIME: 10:49:27

Input Set : F:\0501_UTL_0.ST25.txt

Output Set: N:\CRF4\01042006\J559595.raw

3 <110> APPLICANT: Ong, John
 4 Stetsko, Gregg
 5 Jennings, Robert
 7 <120> TITLE OF INVENTION: Novel Methods and Compositions for Enhanced Transmucosal
 Delivery
 8 of Peptides and Proteins
 10 <130> FILE REFERENCE: 0501-UTL-0
 C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/559,595
 C--> 12 <141> CURRENT FILING DATE: 2005-11-30
 12 <150> PRIOR APPLICATION NUMBER: US 60/474,233
 13 <151> PRIOR FILING DATE: 2003-05-30
 15 <150> PRIOR APPLICATION NUMBER: PCT/ US2004/017456
 16 <151> PRIOR FILING DATE: 2004-05-28
 18 <160> NUMBER OF SEQ ID NOS: 292
 20 <170> SOFTWARE: PatentIn version 3.3
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 39
 24 <212> TYPE: PRT
 25 <213> ORGANISM: Heloderma horridum
 28 <220> FEATURE:
 29 <221> NAME/KEY: MOD_RES
 30 <222> LOCATION: (39)..(39)
 31 <223> OTHER INFORMATION: AMIDATION
 33 <400> SEQUENCE: 1
 35 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 36 1 5 10 15
 39 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 40 20 25 30
 43 Ser Gly Ala Pro Pro Pro Ser
 44 35
 47 <210> SEQ ID NO: 2
 48 <211> LENGTH: 39
 49 <212> TYPE: PRT
 50 <213> ORGANISM: Heloderma suspectum
 52 <400> SEQUENCE: 2
 54 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
 55 1 5 10 15
 58 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
 59 20 25 30
 62 Ser Gly Ala Pro Pro Pro Ser
 63 35
 66 <210> SEQ ID NO: 3
 67 <211> LENGTH: 39
 68 <212> TYPE: PRT

CP8-6)

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Input Set : F:\0501_UTL_0.ST25.txt

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69 <213> ORGANISM: Artificial Sequence
71 <220> FEATURE:
72 <223> OTHER INFORMATION: Synthetic construct
74 <220> FEATURE:
75 <221> NAME/KEY: VARIANT
76 <222> LOCATION: (1)..(1)
77 <223> OTHER INFORMATION: His, Arg or Tyr
79 <220> FEATURE:
80 <221> NAME/KEY: VARIANT
81 <222> LOCATION: (2)..(2)
82 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
84 <220> FEATURE:
85 <221> NAME/KEY: VARIANT
86 <222> LOCATION: (3)..(3)
87 <223> OTHER INFORMATION: Asp or Glu
89 <220> FEATURE:
90 <221> NAME/KEY: VARIANT
91 <222> LOCATION: (6)..(6)
92 <223> OTHER INFORMATION: Phe, Thr or naphthylalanine
94 <220> FEATURE:
95 <221> NAME/KEY: VARIANT
96 <222> LOCATION: (7)..(7)
97 <223> OTHER INFORMATION: Thr or Ser
99 <220> FEATURE:
100 <221> NAME/KEY: VARIANT
101 <222> LOCATION: (8)..(8)
102 <223> OTHER INFORMATION: Ser or Thr
104 <220> FEATURE:
105 <221> NAME/KEY: VARIANT
106 <222> LOCATION: (9)..(9)
107 <223> OTHER INFORMATION: Asp or Glu
109 <220> FEATURE:
110 <221> NAME/KEY: VARIANT
111 <222> LOCATION: (10)..(10)
112 <223> OTHER INFORMATION: Leu, Ile, Val, pentylglycine or Met
114 <220> FEATURE:
115 <221> NAME/KEY: VARIANT
116 <222> LOCATION: (14)..(14)
117 <223> OTHER INFORMATION: Leu, Ile, pentylglycine, Val or Met
119 <220> FEATURE:
120 <221> NAME/KEY: VARIANT
121 <222> LOCATION: (22)..(22)
122 <223> OTHER INFORMATION: Phe, Tyr or naphthylalanine
124 <220> FEATURE:
125 <221> NAME/KEY: VARIANT
126 <222> LOCATION: (23)..(23)
127 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, t-butylglycine or Met
129 <220> FEATURE:
130 <221> NAME/KEY: VARIANT

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131 <222> LOCATION: (24)..(24)
132 <223> OTHER INFORMATION: Glu or Asp
134 <220> FEATURE:
135 <221> NAME/KEY: VARIANT
136 <222> LOCATION: (25)..(25)
137 <223> OTHER INFORMATION: Trp, Phe, Tyr or naphthylalanine
139 <220> FEATURE:
140 <221> NAME/KEY: VARIANT
141 <222> LOCATION: (31)..(31)
142 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
143     N-alkylpentylglycine, or N-alkylalanine
145 <220> FEATURE:
146 <221> NAME/KEY: VARIANT
147 <222> LOCATION: (36)..(38)
148 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
149     N-alkylpentylglycine or N-alkylalanine
151 <220> FEATURE:
152 <221> NAME/KEY: VARIANT
153 <222> LOCATION: (39)..(39)
154 <223> OTHER INFORMATION: Optional amidation
156 <220> FEATURE:
157 <221> NAME/KEY: VARIANT
158 <222> LOCATION: (39)..(39)
159 <223> OTHER INFORMATION: Ser, Thr or Tyr
161 <400> SEQUENCE: 3
W--> 163 Xaa Xaa Xaa Gly Thr Xaa Xaa Xaa Xaa Xaa Ser Lys Gln Xaa Glu Glu
      164 1           5           10           15
W--> 167 Glu Ala Val Arg Leu Xaa Xaa Xaa Xaa Xaa Leu Lys Asn Gly Gly Xaa Ser
      168           20           25           30
W--> 171 Ser Gly Ala Xaa Xaa Xaa Xaa
      172           35
175 <210> SEQ ID NO: 4
176 <211> LENGTH: 38
177 <212> TYPE: PRT
178 <213> ORGANISM: Artificial Sequence
180 <220> FEATURE:
181 <223> OTHER INFORMATION: Synthetic construct
184 <220> FEATURE:
185 <221> NAME/KEY: VARIANT
186 <222> LOCATION: (1)..(1)
187 <223> OTHER INFORMATION: His, Arg, or Tyr
189 <220> FEATURE:
190 <221> NAME/KEY: VARIANT
191 <222> LOCATION: (2)..(2)
192 <223> OTHER INFORMATION: Ser, Gly, Ala or Thr
194 <220> FEATURE:
195 <221> NAME/KEY: VARIANT
196 <222> LOCATION: (3)..(3)
197 <223> OTHER INFORMATION: Ala, Asp or Glu

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199 <220> FEATURE:
200 <221> NAME/KEY: VARIANT
201 <222> LOCATION: (5)..(5)
202 <223> OTHER INFORMATION: Ala or Thr
204 <220> FEATURE:
205 <221> NAME/KEY: VARIANT
206 <222> LOCATION: (6)..(6)
207 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine
209 <220> FEATURE:
210 <221> NAME/KEY: VARIANT
211 <222> LOCATION: (7)..(7)
212 <223> OTHER INFORMATION: Thr or Ser
214 <220> FEATURE:
215 <221> NAME/KEY: VARIANT
216 <222> LOCATION: (8)..(8)
217 <223> OTHER INFORMATION: Ala, Ser or Thr
219 <220> FEATURE:
220 <221> NAME/KEY: VARIANT
221 <222> LOCATION: (9)..(9)
222 <223> OTHER INFORMATION: Asp or Glu
224 <220> FEATURE:
225 <221> NAME/KEY: VARIANT
226 <222> LOCATION: (10)..(10)
227 <223> OTHER INFORMATION: Ala, Leu, Ile, Val, pentylglycine or Met
229 <220> FEATURE:
230 <221> NAME/KEY: VARIANT
231 <222> LOCATION: (11)..(11)
232 <223> OTHER INFORMATION: Ala or Ser
234 <220> FEATURE:
235 <221> NAME/KEY: VARIANT
236 <222> LOCATION: (12)..(12)
237 <223> OTHER INFORMATION: Ala or Lys
239 <220> FEATURE:
240 <221> NAME/KEY: VARIANT
241 <222> LOCATION: (13)..(13)
242 <223> OTHER INFORMATION: Ala or Gln
244 <220> FEATURE:
245 <221> NAME/KEY: VARIANT
246 <222> LOCATION: (14)..(14)
247 <223> OTHER INFORMATION: Ala, Leu, Ile, pentylglycine, Val or Met
249 <220> FEATURE:
250 <221> NAME/KEY: VARIANT
251 <222> LOCATION: (15)..(17)
252 <223> OTHER INFORMATION: Ala or Glu
254 <220> FEATURE:
255 <221> NAME/KEY: VARIANT
256 <222> LOCATION: (19)..(19)
257 <223> OTHER INFORMATION: Ala or Val
259 <220> FEATURE:

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Input Set : F:\0501_UTL_0.ST25.txt

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260 <221> NAME/KEY: VARIANT
 261 <222> LOCATION: (20)..(20)
 262 <223> OTHER INFORMATION: Ala or Arg
 264 <220> FEATURE:
 265 <221> NAME/KEY: VARIANT
 266 <222> LOCATION: (21)..(21)
 267 <223> OTHER INFORMATION: Ala or Leu
 269 <220> FEATURE:
 270 <221> NAME/KEY: VARIANT
 271 <222> LOCATION: (22)..(22)
 272 <223> OTHER INFORMATION: Ala, Phe, Tyr or naphthylalanine
 274 <220> FEATURE:
 275 <221> NAME/KEY: VARIANT
 276 <222> LOCATION: (23)..(23)
 277 <223> OTHER INFORMATION: Ile, Val, Leu, pentylglycine, t-butylglycine or Met
 279 <220> FEATURE:
 280 <221> NAME/KEY: VARIANT
 281 <222> LOCATION: (24)..(24)
 282 <223> OTHER INFORMATION: Ala, Glu or Asp
 284 <220> FEATURE:
 285 <221> NAME/KEY: VARIANT
 286 <222> LOCATION: (25)..(25)
 287 <223> OTHER INFORMATION: Ala, Trp, Phe, Tyr or naphthylalanine
 289 <220> FEATURE:
 290 <221> NAME/KEY: VARIANT
 291 <222> LOCATION: (26)..(26)
 292 <223> OTHER INFORMATION: Ala or Leu
 294 <220> FEATURE:
 295 <221> NAME/KEY: VARIANT
 296 <222> LOCATION: (27)..(27)
 297 <223> OTHER INFORMATION: Ala or Lys
 299 <220> FEATURE:
 300 <221> NAME/KEY: VARIANT
 301 <222> LOCATION: (28)..(28)
 302 <223> OTHER INFORMATION: Ala or Asn and optionally amidated if positions 29-28 absent
 304 <220> FEATURE:
 305 <221> NAME/KEY: VARIANT
 306 <222> LOCATION: (29)..(29)
 307 <223> OTHER INFORMATION: Gly or absent and optionally amidated if positions 30-38
 absent
 309 <220> FEATURE:
 310 <221> NAME/KEY: VARIANT
 311 <222> LOCATION: (30)..(30)
 312 <223> OTHER INFORMATION: Gly or absent and optionally amidated if positions 31-38
 absent
 314 <220> FEATURE:
 315 <221> NAME/KEY: VARIANT
 316 <222> LOCATION: (31)..(31)
 317 <223> OTHER INFORMATION: Pro, homoproline, 3Hyp, 4Hyp, thioproline, N-alkylglycine,
 318 N-alkylpentylglycine N-alkylalanine or absent and optionally
 319 amidated if positions 32-38 absent

RAW SEQUENCE LISTING ERROR SUMMARY
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Input Set : F:\0501_UTL_0.ST25.txt
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:3; Xaa Pos. 1,2,3,6,7,8,9,10,14,22,23,24,25,31,36,37,38,39
Seq#:4; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23,24
Seq#:4; Xaa Pos. 25,26,27,28,31,36,37,38
Seq#:5; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:5; Xaa Pos. 24,25,26,27,28,31,36,37,38,39
Seq#:244; Xaa Pos. 2,5,6,10,16,17,18,20,21,25,27,28,29,30,31,32
Seq#:245; Xaa Pos. 2,6,10,16,17,20,24,29,31,32
Seq#:246; Xaa Pos. 2,16,17,21,24,31,32
Seq#:247; Xaa Pos. 1,2,16,31
Seq#:248; Xaa Pos. 1,2,7,13,17,18,19,20,21,23,25,26,28,29,31

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/559,595

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Input Set : F:\0501_UTL_0.ST25.txt

Output Set: N:\CRF4\01042006\J559595.raw

L:12 M:270 C: Current Application Number differs, Replaced Current Application No
L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:163 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:167 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:16
L:171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:32
L:365 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:16
L:373 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:32
L:576 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:584 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32
L:6645 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:244 after pos.:0
L:6649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:244 after pos.:16
L:6717 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:0
L:6721 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:245 after pos.:16
L:6773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:246 after pos.:0
L:6777 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:246 after pos.:16
L:6819 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:247 after pos.:0
L:6823 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:247 after pos.:16
L:6921 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:248 after pos.:0
L:6925 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:248 after pos.:16